

REMARKS

In the Office Action dated August 23, 2007, claims 1, 3, 4, 6, 7, 9-12 and 14, in the above-identified U.S. patent application were rejected. Reconsideration of the rejections is respectfully requested in view of the above amendments and the following remarks. Claims 1, 3-4, 6, 7, 9-12 and 14 remain in this application, claims 2, 23 and 24 have been canceled and claims 5, 8, 13, and 15-22 have been withdrawn.

Claims 1, 3-4, 6-7, 9-12 and 14 were rejected under 35 USC §112, second paragraph, as indefinite. The claims have been amended to recite the term “comprising” instead of “has” and to indicate that L is a marker group in the first antigen and when the second antigen has the formula Ia or Ib, L is a group which binds to a solid phase. Regarding the detection of the marker group on the solid phase, the claims have been amended to more clearly indicate that the complex is detected on the solid phase. In view of these amendments, applicants request that this rejection be withdrawn.

Claims 1, 3-4, 6, 9, 12 and 14 were rejected under 35 USC §102(e) as anticipated by Flavell. Applicants respectfully point out that column 6, lines 21-23 of Flavell indicates that “while larger flagellin polypeptides may be more sensitive, additional flagellin sequences may result in a decrease in specificity”. Flavell does not include specific disclosure where the first and second antibodies both have 2 or more peptides covalently bound to a carrier where the epitope regions of the peptides are identical in amino acid sequence and both the first antigen and the second antigen include at least one marker group. In view of this, applicants request that this rejection be withdrawn.

Claims 1, 3-4, 6-7, 9-12 and 14 were rejected under 35 USC §103(a) as unpatentable over Rejman, Formoso and Watts. Rejman does not disclose antigens according to formula (Ia) and (Ib) and their use as antigens with several marker groups in a double-antigen bridge test or the use of multimeric detection antigens with multiple, identical epitope regions. Though the office action contends that Formoso discloses a multimer with multiple epitope regions of identical amino acid sequence, applicants respectfully disagree. Formoso's claims indicate that the reagent comprises "at least one synthetic peptide" from a long list, Formoso does not indicate that two identical peptides should be used. Thus, Formoso does not cure the deficiencies discussed above regarding Rejman. Watts was cited for the disclosure of antidigoxigenin and antidigoxigenin antibody in binding assays. Watts does not disclose a detection antigen with multiple identical epitope regions and thus does not cure the above discussed deficiencies in Rejman and Formoso. The presently claimed invention uses a first (detection) antigen with several identical epitope regions which improves the sensitivity of the test. Since neither Rejman, Formoso, nor Watts disclose the use of multimeric detection antigens comprising multiple, identical epitope regions and multiple marker groups, applicants contend that the presently claimed invention is patentable over the combination of Rejman, Formoso and Watts and request that this rejection be withdrawn.

Claims 1, 3-4, 6-7, 9-12 and 14 were rejected on the ground of nonstatutory obviousness type double patenting as unpatentable over claims 1-31 of U.S. Patent No. 5,804,371. A terminal disclaimer is being prepared and will be filed shortly.

Applicants respectfully submit that all of claims 1, 3-4, 6, 7, 9-12 and 14 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event that this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with additional fees that may be due with respect to this paper may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

By /Monica Chin Kitts/

Monica Chin Kitts
Attorney for Applicant
Registration No. 36,105
ROTHWELL, FIGG, ERNST & MANBECK
1425 K. Street, Suite 800
Washington, D.C. 20005
Telephone: (202) 783-6040

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